

ANALYSIS OF AMENDED BILL

Franchise Tax Board

Author: Brulte Analyst: Roger Lackey Bill Number: SBX 17
Related Bills: See Legislative History Telephone: 845-3627 Amended Date: 02/15/2001
Attorney: Patrick Kusiak Sponsor: _____

SUBJECT: Solar Energy System Credit

SUMMARY

This bill would allow a credit for the purchase and installation of a solar energy system.

SUMMARY OF AMENDMENT

The February 15th amendments specified the following:

- The credit would not exceed the applicable percentage of the net costs of the solar energy system, after deducting the value of any state- or federal-sponsored financial incentives.
- The applicable percentage would mean 50% or 25% of the net costs, depending on the taxable year(s).
- A solar energy system must have a peak generating capacity of at least 10 kilowatts but not more than 200 kilowatts, and be used for the individual capacity of generating electricity.

The amendment also made other technical changes.

The February 5, 2001, amendments made several changes that were subsequently deleted or amended by the February 15, 2001, amendments.

This is the department's first analysis of the bill.

PURPOSE OF THE BILL

From discussion with the author's staff, the intent of this bill is to encourage the use of alternative energy sources to help resolve the state's energy crisis.

EFFECTIVE/OPERATIVE DATE

As a tax levy, this bill would be effective immediately and would be operative for taxable years beginning on or after January 1, 2001, and before January 1, 2006.

POSITION

Pending.

Board Position:

____ S ____ NA ____ NP
____ SA ____ O ____ NAR
____ N ____ OUA ____ X PENDING

Department Director

Date

Gerald H. Goldberg

03/08/01

Summary of Suggested Amendments

Department staff is available to work with the author's office to resolve the implementation and policy considerations discussed below.

ANALYSIS

FEDERAL/STATE LAW

Federal law currently provides two energy-related credits: an energy credit that is one portion of the investment credit and a business credit for the production of electricity from certain renewable resources.

The energy investment credit is equal to 10% of the basis of energy property placed in service during the taxable year. Energy property includes equipment that uses solar energy to generate electricity, to heat or cool a structure, or to provide solar process heat. It also includes equipment that produces, distributes, or uses energy derived from geothermal deposits. The equipment also must meet performance and quality standards prescribed by federal regulations.

The business credit for the production of electricity from certain renewable resources is equal to 1.5 cents multiplied by the kilowatt hours of electricity produced by the taxpayer from qualified energy resources at a qualified facility. To qualify for the credit the electricity is required to be sold to an unrelated person during the taxable year. Qualified energy resources include wind, closed-loop biomass, and poultry waste.

Former state law provided a credit equal to 10% of the cost of a solar energy system installed on premises located in California and used for commercial purposes. The credit was available for taxable or income years beginning on or after January 1, 1990, and before January 1, 1994.

The credit provisions defined "solar energy system" as solar, thermal, electric, and photovoltaic systems, but did not include devices that produced electricity through wind energy or energy conservation measures.

The former solar energy credit is further discussed in the PROGRAM BACKGROUND section of the analysis below.

Current state law does not provide a credit for solar energy systems.

THIS BILL

This bill would allow a credit not to exceed the applicable percentage of the cost to purchase and install a solar energy system on property located in California for the production of electricity. The credit would be calculated after deducting the value of any federal and state-sponsored financial incentives received by the taxpayer.

The applicable percentage would be:

- for taxable years beginning on or after January 1, 2001, and before January 1, 2004, 50 percent.
- for taxable years beginning on or after January 1, 2004, and before January 1, 2006, 25 percent.

The credit would also be equal to \$2.50 per rated watt of generating capacity of the solar energy system, as measured by the PV USA Test Conditions (PTC) procedure.

A “solar energy system” would be defined as a solar energy device with a peak generating capacity of at least 10 kilowatts and not more than 200 kilowatts. The system must be used solely for producing electricity. A “solar energy device” must be in the form of either a photovoltaic or wind-driven system.

This bill would disallow a deduction for any cost for which this credit is allowed.

This bill would allow any excess credit to be carried over and used in the following eight years.

IMPLEMENTATION CONSIDERATIONS

It is not clear who or what state agency would be responsible for determining or certifying if a “solar energy system” has a peak generating capacity of at least 10 kilowatts and not more than 200 kilowatts. The prior solar energy credit required the State Energy Resources Conservation and Development Commission to establish eligible costs, guidelines, and criteria for solar energy systems that would be eligible for the credit.

It is also not clear what the PV USA Test Conditions procedure is and who will administer it.

The bill does not require the solar energy system to be used after installation, nor does the bill provide a minimum amount of kilowatt hours to be generated per month.

The terms “photovoltaic” and “wind-driven” are not defined.

The bill does not require the solar energy system to be installed on property owned or leased by the taxpayer.

A large number of taxpayers lease certain items of property rather than purchase them. It appears that this credit would not apply to a taxpayer that leases a “solar energy system” for use in this state. However, the bill does not prevent the taxpayer that purchases a solar energy system and leases it to another taxpayer in this state from claiming the credit, even if the lessee is essentially paying for the solar energy system.

Property developers may, as an incentive for buyers, install “solar energy systems” on property they develop. It is unclear whether developers would be allowed to claim the credit for these systems or if the developers could elect to pass the credit to buyers of the property.

Generally, credits require taxpayers to recapture the credit amount by adding the amount of the credit back to their tax liability if the item that qualified for the credit is subsequently sold or removed from the state within a specific amount of time after the purchase date. This bill requires no such recapture of the credit.

This bill would require the credit to be reduced by the amount of any other state or federal sponsored financial incentives received for the solar energy system. However, the phrase "any other state or federal sponsored incentives" is not clearly defined. Consequently, this provisions would be difficult to administer.

The bill requires otherwise allowable costs to be reduced by the "value" of these incentives. "Value" is not defined. Undefined terms and concepts lead to disputes with taxpayers and complicate implementation and administration of the credit.

The amount of the credit may not exceed the applicable percentage of amounts paid to purchase and install a solar energy system. The amount of the credit is also equal to \$2.50 per rate watt of generating capacity. The author's staff has indicated the intent is to allow a credit in an amount equal to the applicable percentage of net purchase and installation costs, up to a maximum of credit amount for a solar energy system of \$2.50 per watt of generating capacity of that solar energy system. Amendments would be needed to clearly reflect this intent.

LEGISLATIVE HISTORY

AB 873 Takasugi (1997/1998) would have allowed a credit equal to 10% of the cost of a solar energy system installed on premises located in California and used for commercial purposes. The bill also would have allowed a second credit equal to 40% of the cost of energy conservation measures. The bill failed to pass the Assembly Revenue and Taxation Committee.

PROGRAM BACKGROUND

For taxable years 1990 through 1993, state law allowed a tax credit of 10% of the cost of a solar energy system installed on premises, used for commercial purposes that were located in California, and owned or leased by the taxpayer. The credit could not be claimed for any solar energy system with a generating capacity in excess of 30 megawatts for any taxable year unless the federal government provided at least a 10% federal credit for that solar energy system.

For 1987 and 1988 state law allowed a credit of 12% of the cost of commercial solar energy systems installed on commercial premises, cooperatives, apartment buildings, or other similar multiple dwellings.

From 1976 to 1988 state law allowed the solar energy tax credit for personal and commercial premises. The credit was refundable for modest income individual taxpayers until 1982 and was significantly modified several times. The credit was allowed as a percentage of the purchase and installation costs of solar energy systems on premises owned by the taxpayer. Except for taxpayers allowed a refund, any unused credit could be carried over indefinitely.

In 1987, the percentages allowed for the solar energy tax credit were 10% of the eligible costs for single-family dwellings, not to exceed a credit of \$1,000. For commercial property the percentage was 25% of the eligible costs.

OTHER STATES' INFORMATION

The laws of these states were reviewed because their tax laws are similar to California's income tax laws.

Massachusetts: Currently has an energy credit that is equal to 15% of the net expenditures or \$1,000, whichever is less.

New York: For personal income tax only, New York allows a credit for solar generating equipment equal to 25% of certain solar generating expenditures. The credit is capped at \$3,700 per system.

Michigan: Does not allow an energy-related credit, but exempts the value of energy conservation devices from the local property tax.

Oregon: Currently has two energy credits, a personal income tax consumer energy purchases credit and a corporate tax credit for the costs of energy projects. The consumer energy purchases credit allows various credits ranging from \$50 to \$1,500 for consumer purchases of certain items. The corporate credit for the costs of energy projects is a credit equal to 35% of the incremental costs of the project involving energy conservation and other related projects.

FISCAL IMPACT

Once the implementation concerns are resolved, this bill would not significantly impact the department's costs.

ECONOMIC IMPACT

Tax Revenue Estimate

Based on the discussion below, the revenue loss from this bill is as follows:

Revenue Impact of SBX 17 For Taxable Years Beginning 1/1/2001 Assumed Enactment After 6/30/01 Fiscal Impact (In Millions)		
2001-02	2002-03	2003-04
-\$40	-\$50	-\$55

This analysis does not consider the possible changes in employment, personal income, or gross state product that could result from this proposal.

Tax Revenue Discussion

The impact of this bill would depend upon the number of taxpayers and businesses incurring qualifying solar energy expenses and the average credit applied against tax liabilities.

Despite current low levels of solar electrical use by taxpayers and businesses, a significant incentive effect under this proposal is expected. Qualifying solar system costs can vary significantly. For this analysis an average cost of approximately \$129,000 for 2001 was used (net of special rebate programs). This average was based on an average system size of 29 kilowatts. The projected volumes were based on the California Energy Commission's projected rebate program.

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